Amendments to the Specification

Please replace paragraph [0038] of the specification with the following paragraph [0038]:

FIG. 5 is a schematic illustration of a reference reticle 126 according to an embodiment of the present invention. As shown in FIG. 5, reference reticle 126 has two major regions 502 on a single plate 503. In embodiments, plate 503 can be tilted to direct incident illumination energy away from the pupil of projection optics 106 as described further below with reference to FIG. 10. Each major region 502 includes a plurality of subregions 504 having reference features 506. In the exemplary embodiment of FIG. 5, subregion ~~502a~~ 504a has four reference features 506a, 506b, 506c, and 506d. Feature 506a is a series of parallel lines running in the Y-direction. Feature 506b is a series of parallel lines running in the X-direction. Feature 506c is a series of parallel lines running at a 45 degree diagonal to the Y-direction. Feature 506d is a series of lines running perpendicular to the lines of feature 506c. As would be known to persons skilled in the relevant art(s), these four line orientations are useful for setting up and calibrating a lithography tool. Additional lines having different orientations can be included in other subregions 504, for example, to evaluate stitching operations. In an embodiment, the features of reference reticle 126 are formed using clear openings in a chrome mask. However, any known means can be used to form the features of a reference reticle, including a grating.

Please replace paragraph [0057] of the specification with the following paragraph [0057]:

FIG. 9 is a schematic illustration of an aerial image test 900 according to an embodiment of the present invention. In test 900, illumination energy is emitted by illumination source 102 and conditioned by illumination optics 110. The illumination energy is directed to spatial light modulator 104 with beam-splitter 112. A signal is applied to spatial light modulator 104 to form a die pattern of reference features contained on the reference reticle of spatial light modulator 104. Projection optics 106

form a die image with light reflected off the spatial light modulator cells of spatial light modulator 104 and a reference image with light reflected off the reference reticle of spatial light modulator 104, as described herein. In test 900, the die image and the reference image are detected using an image scanner 902. In embodiments, image scanners 902a-d are installed at and can capture images at one or more locations ~~902a, 902b, 902c, and 902d~~ as illustrated in FIG. 9. The locations are preferably proximate to the edge of wafer 802. Movement of the wafer stage 108 in the Z-direction allows an image scanner 902 to capture a three-dimensional image. As would be known to persons skilled in the relevant art(s) given the description herein, by capturing and comparing aerial images of the die image and the reference image, both the optics of tool 100 and the spatial light modulator cells and their related components of tool 100 can be tested and calibrated. Test 900 can be used, for example, to find the best focus of tool 100. In embodiments, test 900 is automatically performed on a periodic basis to keep tool 100 operating as intended. An example comparator/controller 904 is shown in FIG. 2 that automatically adjusts pattern rasterizer 114 based on a comparison of the die image and the reference image. How to implement comparator/controller 904 will be understood by persons skilled in the relevant art(s) given the description herein.